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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,003	04/12/2004	Masahiko Sugimoto	F02-167191C/FK	1589

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EXAMINER	
SMITH, JEFFREY S	

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,003

Applicant(s)

SUGIMOTO, MASAHIKO

Examiner

Jeffrey S. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 7, 8, 12, 13 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 9-11, 14, 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6, 10, 14 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,638,136 issued to Kojima et al. ("Kojima").

For claims 1 and 22, Kojima discloses a method for detecting whether an image of a characteristic portion exists in an image to be processed, comprising: sequentially cutting images of a required size from the image to be processed (Y1, Y2 and Y3 of figure 113); comparing the cut images with verification data corresponding to the image of the characteristic portion (face is compared with template in figure 113), and limiting a size range of the image of the characteristic portion with reference to the size of the image to be processed, based on information about a distance between a subject and a location of imaging the subject, obtained when the image to be processed has been photographed, thereby limiting the size of the cut images to be compared with the verification data (the size of the template and the face are determined based on the object distance and the focal length as shown in figure 109).

For claim 2, Kojima discloses that the limitation is effected through use of information about a focal length of a photographing lens in addition to the information about a distance to the subject (see figure 109).

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For claim 6, Kojima discloses that the verification data comprises template image data pertaining to the image of the characteristic portion as shown in figure 113.

For claim 10, which has the elements of claim 1 expressed in computer readable medium form, this claim is rejected for the reasons given in claim 1.

For claim 14, Kojima determines the distance information used in limiting the size range as shown in figure 109.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of U.S. Patent Number 6,292,575 issued to Bortolussi et al. ("Bortolussi").

Kojima discloses the elements of claim 1.

Bortolussi discloses the comparison is performed through use of a resized image into which the image to be processed has been resized as shown in figure 5.

It would have been obvious to one of ordinary skill in this art at the time of invention to modify the matching method of Kojima to include the step of resizing the image when performing the comparison because the multi-scale correlation technique is relatively fast to process as taught by Bortolussi at column 9 lines 33-50.

Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of U.S. Patent Number 6,580,810 issued to Yang et al. ("Yang"). figures 7a and 7b

For claim 9, Kojima discloses the elements of base claim 1.

Yang discloses limiting a range in which an image of a characteristic portion of a second image to be processed followed by a first image to be processed, is retrieved through use of the information.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the matching method of Kojima to limit the size of the search window for the benefit of being more precise in matching as taught by Yang at col. 6 line 66 through col. 7 line 14.

Claim 11, which contains elements similar to claim 9, is rejected for the reasons given in the rejection of claim 9.

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of U.S. Patent Number 4,916,302 issued to Sorimachi ("Sorimachi").

For claim 23, Kojima discloses the elements of claim 22. Kojima does not explicitly state that the distance between the subject and the camera is determined during said imaging by using a range sensor.

Sorimachi discloses an apparatus for measuring a distance to an object that is determined when imaging the object using a range sensor (figs 1a and 1b).

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It would have been obvious to one of ordinary skill in the art at the time of invention to include the range sensor of Sorimachi with the face detector of Kojima for the benefit of automatically determining the distance to the object as taught by Sorimachi.

For claim 24, Sorimachi discloses the distance is determined based on a signal from the range sensor (figs 1a and 1b).

Response to Arguments

Applicant's arguments filed November 13 have been fully considered but they are not persuasive.

Applicant argues that limiting a size range of the image of the characteristic portion (e.g., a size of a search window) with reference to the size of the image to be processed, based on information about a distance between a subject and a location of imaging the subject, obtained when the image to be processed has been photographed, thereby limiting the size of the cut images to be compared with the verification data is novel. This feature is disclosed by Kojima as shown in figures 97-121 and throughout the corresponding descriptions. For example compare the distance based size limit of the search window in figure 110 used in cutting images in figure 113 that are compared with verification data to figures 3 and 4 of the invention.

Applicant argues that Bertolussi does not disclose the limiting element. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the combination of Kojima and Yang is impermissible hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, Kojima and Yang are both concerned with detecting a face by limiting a size of a search window. Therefore they are related and using one size limited search window method with another size limited search window method is obvious to try.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS
December 28, 2007

JINGGE WU
SUPERVISORY PATENT EXAMINER

